iSecurity101

Access Control Keypad with Waterproof

Model: YK-1068
Model: YK-1168

Introduction

YK-1068/1168 Standard alone access control realize the card reading and keypad operation functions, lock, alarm, ring bell, exit button and the magnetic contact switch on the door. The access host supports 125kHz EM cards (YK-1068B YK-1168B YK-1068A YK-1168A)

It controls 1 door, supports up to 2000 users in total, each user have one card and one PIN. The access control unit supports 1 master code, one manager add card, one manager delete card, 1 anti-duress card and 1 anti-duress PIN, providing users with easy operation and safe guarantee.

Features

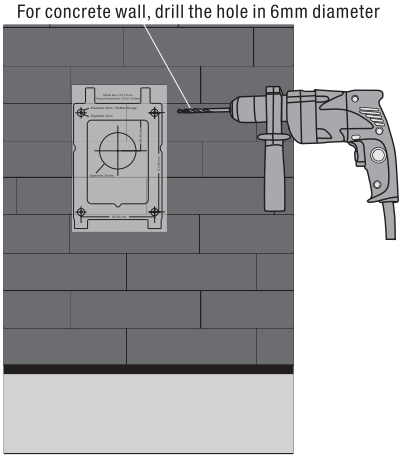
- Aluminium alloy case, waterproof, fully potted, confirms to IP65
- Metal keypad(YK-1168A/YK-1168B) and touch panel(YK-1068A/YK-1068B) optional.
- 125KHz(EM card) reader (YK-1068A/YK-1068B) Digital backlit key(YK-1168A/ YK-1168B)and touch panel (YK-1068A/YK-1068B).
- The back light can be set to Normal ON, Normal OFF or Auto.
- With door bell function, build-in or external door bell optional.
- Multi-function, operating as slave reader, single door, anti-pass back function, etc, suitable for various occasions.

Specifications

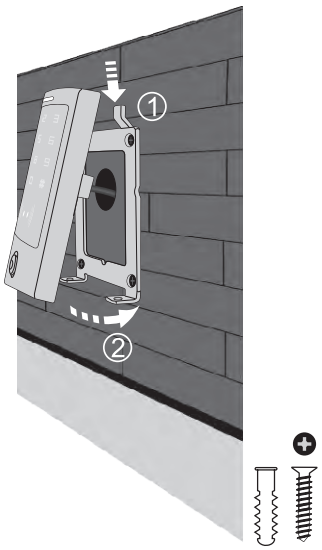
- Dimensions: 158.6×43×21.7mm(A) 125×83×21.7mm(B)
- Operating voltage range: DC12-24V
- Idle input current: ⩽35mA
- Max proximity card read range: EM card: 3-6cm
- Excitation Frequency: 125KHz (YK-1068A/YK-1168A, YK-1068B/YK-1168B)
- Card transmit format: Wiegand 26-37
- Keypad transmit format: 4-6 digits key press to output card number format, 4 bits or 8 bits data.
- Operating temperature range: -40～60° C(EM card)
- Operating humidity: 0～95%(non-condensing)
- Weight: 0.5kg(A)/0.4kg(B)

1 Drill Holes

For concrete wall, drill the hole in 6mm diameter

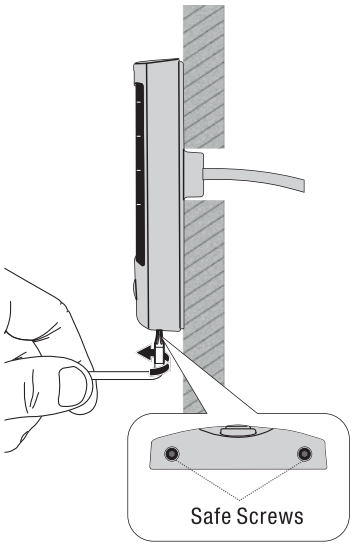


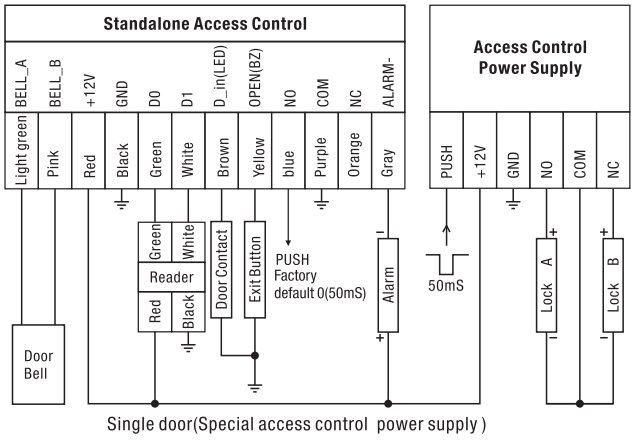
2 Fix the Bracket and Install the Access Host

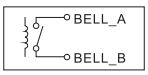


Pay attention to the sequence during installation

3 Fix Safe Screws

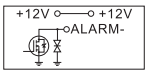






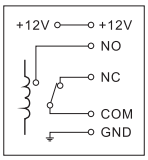
Principle of Door bell Connector

Each press of door bell button, contact of relay in BELL_A and BELL_B will close contact for 200ms then release.



Principle of Alarm Connector

The field-effec tube will be conducted when alarm is activated; it will be not conducted when alarm is removed.



Principle of electronic lock

The relay will close contact to unlock the lock and will release after unlocking

COM: common, relay contact

NC: normal close, normally keep closed to COM

NO: normal open, normally keep opened to COM

Wiring of electronic lock

Connect COM and GND, congnect two ends of electronic lock with +12V and NO (or NC), complete the circuit.

Type A electronic lock: Fail Secure lock(Unlock when power on),such as Electronic Controlling Lock, smart lock, etc.

Type B electronic lock: Fail Safe lock(Unlock when power off),such as Electronic Controlling Lock, Electronic Bolt lock, etc.

1N4004 Diode: prevent high voltage to two ends of the electronic lock while the contact of relay disconnect. Without diode, there will be high voltage pulse interference to circuits and the life time of the relay will be greatly reduced.

Manager cards operation

1 Add user card(s)(In dual door mode, users can be only added to zone 1)
Read manager add card, Read Usercard .Read manager add card
Cards can be added continuously.
2 Delete user card(s)
Read manager delete card, Read User card .Read manager delete card
Cards can be deleted continuously.

User Operation

1.To unlock the lock by one card: Read valid card once, the lock will be unlocked.

2. To unlock the lock for card and PIN users
Read valid card once Input 4-6 digits PIN # , the lock will be unlocked.

3. To unlock the lock for card or PIN users
Read valid card Or Input 4-6 digits PIN # , the lock will be unlocked

4. To unlock the lock for multi cards: Read 2-10pcs valid cards (time interval can not exceed 5s), the lock will be unlocked
Precondition: Set the door entry by card only, and set "2-10"for opening the door by multi cards

5. Toggle Mode
In normal mode, Every time a valid card/tag read or PIN input, the replay will operate, for the pre-set replay pulse time.
Every time a valid card/tag read or PIN input in Toggle mode, the relay changes state, which will not turn back until read card/tag or input PIN again.

6. To change the PIN of a PIN user

* Read card Input old PIN # Input new PIN # Input new PIN #
Or
* User ID number Input old PIN # Input new PIN # Input new PIN #

Remark:
For users without card, must get ID number and initial PIN from the master. For Zone 1, the first digit of PIN must be "1", for Zone 2, the first digit of PIN must be "2"
For the card users with PIN "1234", must use Reading card to change the PIN for the first time.

7. Door Bell
Press the door bell button on the access control unit, the buzzer will sound ring back tone, at the same time, the I box's built-in door bell or the outer door bell will ring.
Remark: When the work mode is set in Auto Mode (Factory Default Mode), there will be no ring back tone without the I Box.

Alarm

1. **Anti Tamper Alarm**
When the access control unit is disassembled illegally, the access control unit's buzzer and the external alarm will operate.
2. **Door Status Switch**
When connect with door status switch, if the door is opened illegal, the access control unit's buzzer and the external alarm will operate.
3. **Anti-duress alarm**
When read zone 1 duress card / input 8digits duress PIN OR zone 2 duress card / input 8digits duress PIN, then press #, the corresponding lock will open, at the same time,

the external alarm will operate, but the access control unit's buzzer will not operate.

4. **To remove the alarm**

Read valid card or input master code can remove the alarm. If there is no operation, the alarm will remove automatically after 1 minute.

To Reset to Factory Default

Keypad access control(YK-1168A/YK-1168B), power off, keep pressing * and power on, the logo will turn in orange after 1 second, release it until hearing two shot beep , then hearing a long beep, enter normal mode, reset to factory default setting is successfully.

Touch panel access control(YK-1068A/YK-1068B) ,power off, power on, the logo will turn in orange after 1 second, press * within 1 second, release it until hearing two shot beep, then hearing a long beep, enter normal mode, reset to factory default setting is successfully.

Remark: Reset to factory default, the users' information is still retained.

Sound and Light Indication

Operation Status	Logo Color	Buzzer
Standby	White	
Press Key		Short Ring
Read Card	Green	Long Ring
Unlock the lock	Green	Long Ring
Operation Successful	Green	Long Ring
Operation Failed		3 Short Ring
PIN Inputting	Slow Flash Red	
Card & PIN Reading	Slow Flash Red	
Multi Card Reading	Slow Flash Red	
1st Menu	Slow Flash Red	
2nd Menu	Slow Flash Orange	
Under Setting	Orange	
Manager Card Reading	Orange	2 Short Ring
Manager Card Exit	White	Long Ring
Alarm	Quick Shine in Red	Alarm
Ring-back Tone		Ding-Dong

Master Setting

Logo LED Light indication		Remarks	Functions
White logo	Red logo LED flash	Factory default : 888888	To enter the programming mode
*	6-8 digits Master code #		

Enter Master Operation Mode. it will return to normal mode if there is no right Master PIN input in 5 seconds. After input of right master PIN, it will also return to normal mode if there is no valid operation in 30 seconds. press"#" to confirm the input number, return to previous menu by press"*",the logo light will indicate the operation mode.

Note that to undertake the following programming, the master user must be logged in

1.Basic Operation

Basic Operation			
Red Flash	Orange	Functions	Remarks
0	6~8 digits new master code # Repeat 6~8 digits new master code #	Factory default : 888888	Change the master code

1	Read card 1-2000(ID), #, read card 8 or 10 digits card number① # 1~2000(User ID number), #, 8 or 10 digits card number #	1. The user ID number is any number among 1-2000. 2. Card number must be 8 or 10 digits, if the card number is less than 8 or 10 digits, input 0 before the card number 3. User can be added continuously without exiting programming mode	Rotate Operation③ To add card users②
	1~2000(User ID number), # ,4~6 digits PIN ,#	To add PIN users	
2	Read card 8 or 10 digits card number , #	Delete one card	Rotate Operation
	1~2000(User ID number), #	Delete one user	
2	0000, # (Note: This is a dangerous option, so use with care)	Delete All users	
3	0, #	Entry is by Card only	To set open way
	1, #	Entry is by Card and PIN together	
	2, #	Entry is by either card or PIN (Factory default setting)	
4	0, #	To set door relay time 50mS	Factory default setting: 50mS
	1-99, #	To set door relay time 1-99S	

Note:

① 8 digits card number, such as: 118, 32319, some cards has no mark of the first 3 digits 118, remains 32319, it requires to add card by read card, adding cards by input card number is not acceptable; 10 digits card number, such as 0007765567,some cards has no mark of the first 3 digits 000,remains 7765567, requires to input 10 digits 0007765567 by add 000 before 7765567.

② A PIN 1234 is added for a card, it can not be used to unlock the lock, can be used to change PIN.

③ After one card is added, you can continue to add other cards or PIN without exiting the mode 1.

2 Advanced operation:

Advanced Application				
Red Flash	Orange Flash	Orange	Functions	Remarks
6	1	Read card	Set add card	To add card user
	2	Read card	Set delete card	To delete card user
	3	Read card	To set duress users	To set duress user
	4	8 digits duress PIN,#	To set duress PIN	To set duress PIN
	5	0, #	Automatic mode (Factory default)	Relay setting
		1, #	Set Zone 1as Auto-lock switch①	
	6	1-10, #	Factory default setting :1	To set open door by multi cards②
	7	User ID number # card number # card quantity #	The card number must be consecutive Card quantity is between 1-2000	To add a series cards users. ③
	9	1	Administrator open door 1	Exit automatic④
System Setting				
7	0	1-15, #	Factory default setting: 0	To set facility code
	1	0, #	Wiegand reader mode	To set working mode
		1, #	Standalone for single door (Factory default)	
		5, #	Anti-passback for single door	
	2	26-37, #	(Factory default setting: 26)	To set Wiegand format
	3	0, #	4-6 digis key press sends card number	To set keypad transmission format
		1, #	Each key press sends 4 bit output data (Factory default)	
		2, #	Each key press sends 8 bit output data	

	4	0, #	Close Alarm⑤	To set Alarm
		1-3, #	Alarm time is 0-3 minutes for option (Factory default 1 minute)	
Opeional Setting				
8	1	0, #	Indicator light OFF⑥	To set logo LED light
		1, #	Indicator light ON (Factory default)	
	2	0, #	Disable buzzer ⑦	
		1, #	Enable buzzer (Factory default)	
	3	0, #	Disable keypad backlight	
		1, #	Enable keypad backlight (Factory default)	
		2, #	Auto mode⑧	
	4	0, #	Disable anti tamper alarm (Factory default)	
		1, #	Enable anti tamper alarm	
	5	0, #	No keypad lockout or alarm (Factory default)	
		1, #	In 10 minutes, if there's 10 times⑨invalid card or wrong password, the device will lock on for 10 minutes.	
		2, #	In 10 minutes, if there's 10 times invalid card or wrong password, the device will alarm.	

Remark:

① Every time a valid card/tag read or PIN input in in Toggle mode, the relay changes state, which will not turn back until read card/tag or input PIN again.

②The door will open only when read the valid card quantity up to the quantity set. It is only for Card Only mode.

③ The card number must be consecutive, Card quantity is between 1-2000.

④ After unlocking, enter the normal working state.

⑤ After closed the alarm, anti tamper, anti-duress and door magnetic alarm are invalid.

⑥ Refers to static state, normal indication according to operation.

⑦ Enter the administrator password correctly, the buzzer alarm in the normal phonation.

⑧ Each key press or read card, keypad backlight will light 30S delay after the close, in close state , the first key is just to start the keyboard light, no any function.

⑨ 10 times consecutive errors including: enter an invalid master code, user password, or anti-duress or invalid card.

INSTALLATION